AD-A087 458 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19702A MLRS, MISSILE NUMBER BR-13, ROUND NUMBER B-81, 7 FEBRUAR--ETC(U)
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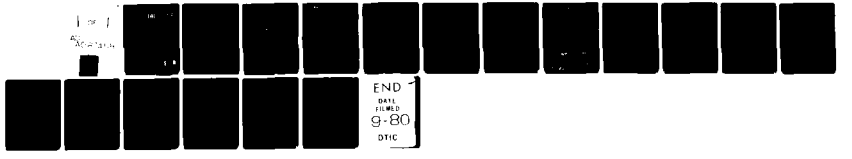

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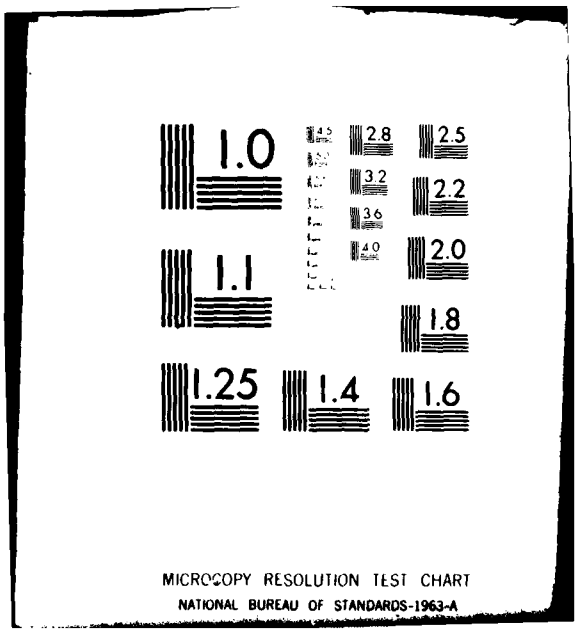
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

BR 1127
FEBRUARY 1980

AD

LEVEL II

12

B.S.

METEOROLOGICAL DATA REPORT

19702A MLRS
Missile No. BR-13
Round No. B-81
07 February 1980

by

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number):

Meteorological data gathered for the launching of the 19702A MLRS, Missile Number BR-13, Round Number B-81 are presented in tabular form.

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CONTENTS

INTRODUCTION

19702A MLRS, Missile Number BR-13, Round Number B-81, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1424 MST on 07 February 1980. The scheduled launch time was 1400:04 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team. Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (^{o}C), relative humidity, dew point (^{o}C), density (gm/m^3), Wind direction and speed, and cloud cover were made at the LC-33 Met Site at *T-0 minutes*.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

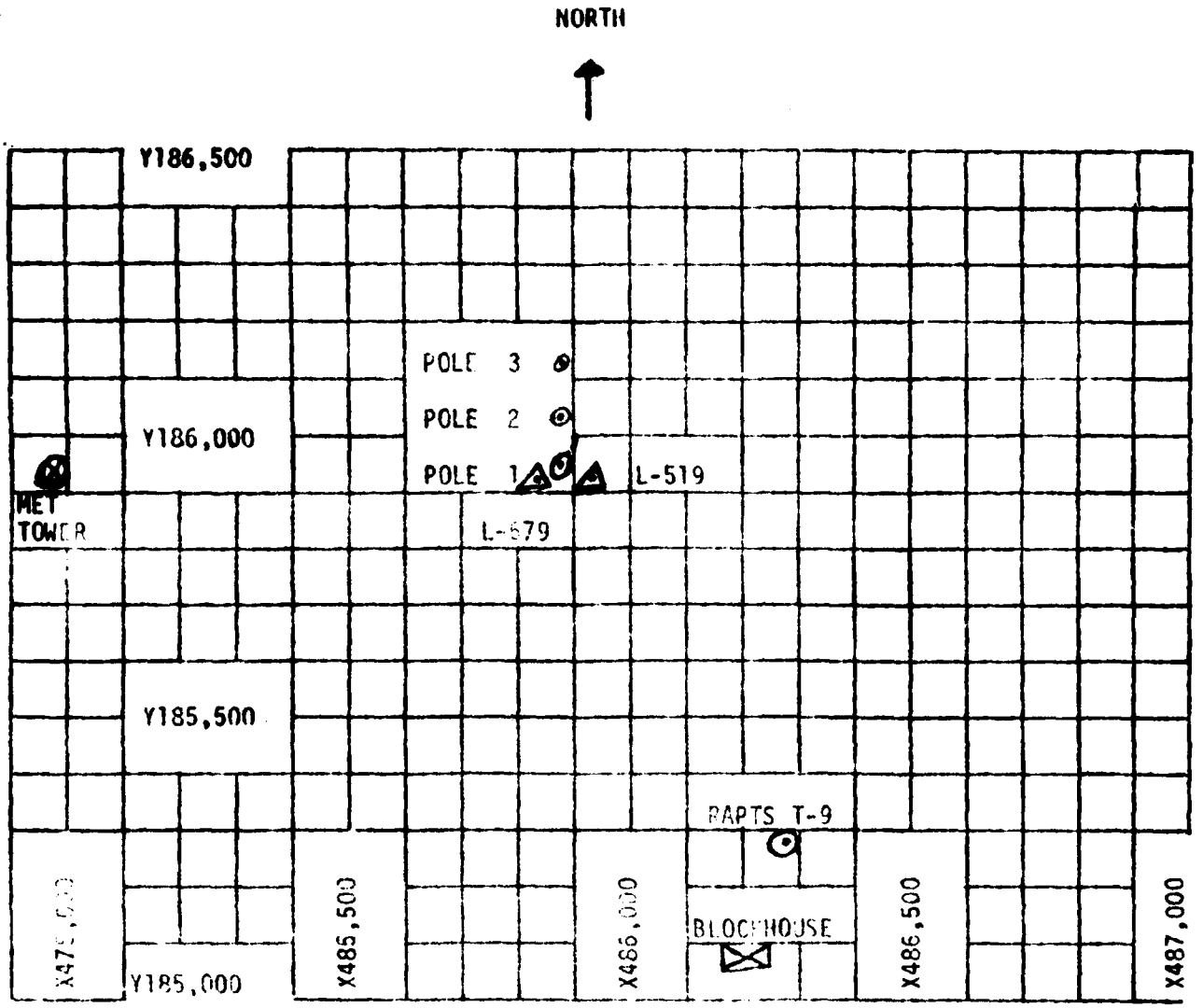
b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE	
LC-33	2 km
Mick	2 km

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 73,000 feet in 500-feet increments.

SITE AND TIME	
MSD	1400 MST



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 17 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.

2. **POLE ANEMOMETER** - Bendix Model T-120 with L/A recorders.

   (a) Pole #1 - 38.7 ft.

   (b) Pole #2 - 53.0 ft.

   (c) Pole #3 - 83.6 ft.

3. **RAPTS T-9** Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

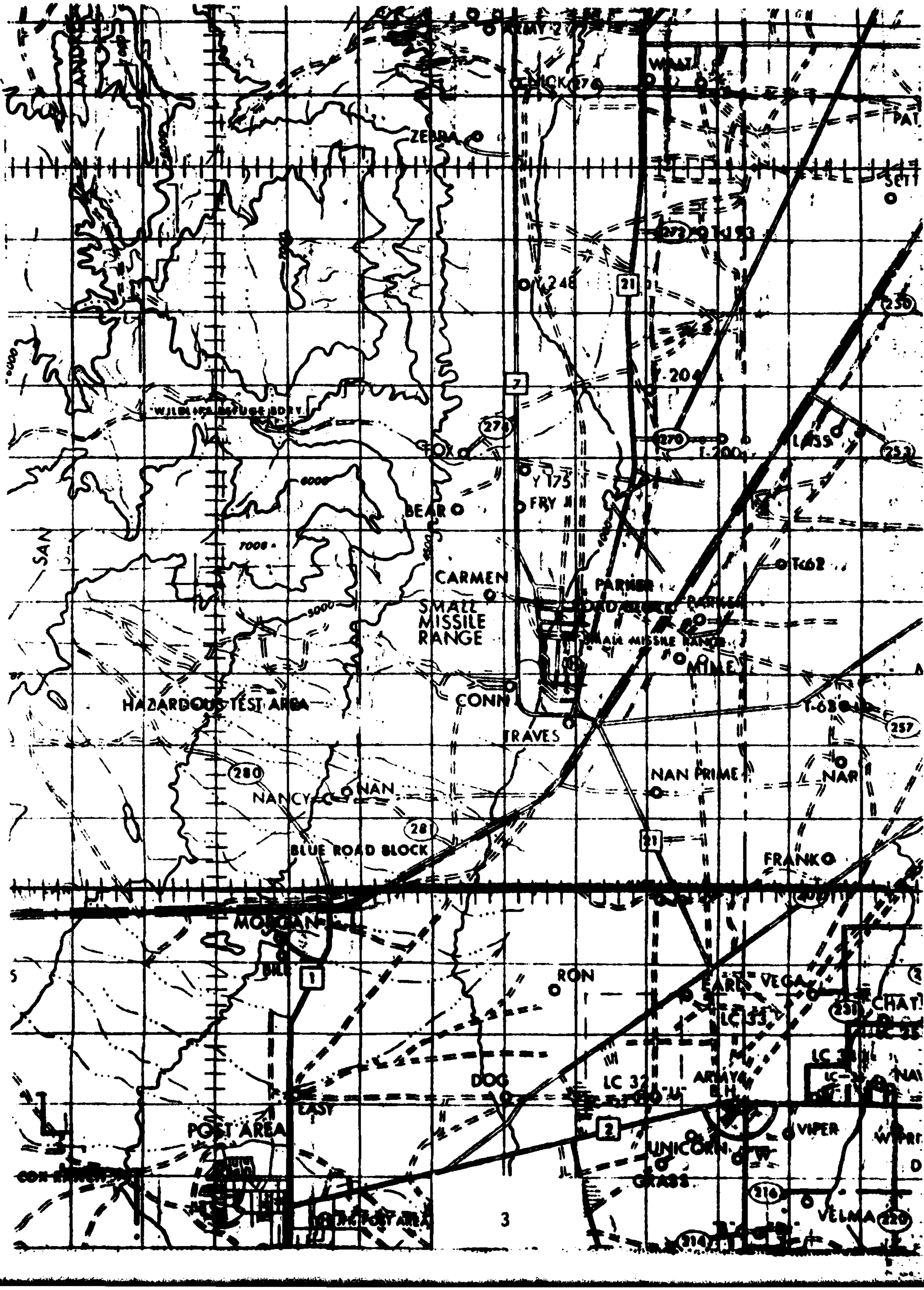

ARMY 2
NICK
ZEBRA
Y 248
T-204
FOX
Y 175
FRY
BEAR
SAN
CARMEN
SMALL
MISSILE
RANGE
PARKER
T-62
T-200
LASS
MIKE
CONN
TRAVES
HAZARDOUS TEST AREA
NAN PRIME
NANCY
NAN
NAR
BLUE ROAD BLOCK
FRANKO
MORGAN
RON
VEGA
LC 33
DOG
LC 32
ARMY 4
EASY
POST AREA
UNICORN
GRASS
VIPER
VELMA
7000
6000
5000

TABLE 1. Surface Observations taken at 1424 MST, 07 February 1980 at LC-33, 19702A MLRS, Missile Number BR-13, Round Number B-81.

ELEVATION	3983	FT/MSL
PRESSURE	868.0	MBS
TEMPERATURE	17.5	^{o}C
RELATIVE HUMIDITY	21	%
DEW POINT	-5.0	^{o}C
DENSITY	1037	GM/M^3
WIND SPEED	17	KTS
WIND DIRECTION	240	DEGREES
CLOUD COVER	3	Cu

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	285	20	-30	271	13	-30	265	22
-20	289	25	-20	273	17	-20	243	26
-10	272	28	-10	257	21	-10	249	25
0.0	275	31	0.0	266	19	0.0	248	28
+10	276	25	+10	258	24	+10	249	26

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484.982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	251	16	-30	255	24
-20	244	21	-20	252	22
-10	248	17	-10	253	20
0.0	236	17	0.0	251	22
+10	252	16	+10	256	24

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	260	23	-30	254	25
-20	252	23	-20	249	27
-10	260	25	-10	250	24
0.0	256	25	0.0	252	24
+10	260	22	+10	261	23

TABLE 4

RELEASED FROM LC-33 DATE 07 February 1980 TIME 1424 MST

TRACKER COORDINATES (WSTM) X= 486,037.24 Y= 182,350.36 H= 3977.30

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL XX OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	240	17
90	MISG	MISG
150	MISG	MISG
210	268	15
270	269	25
330	269	26
390	269	27
500	270	24
650	269	24
800	264	26
950	252	27
1150	250	31
1350	234	32
1550	235	35
1750	227	37
2000	239	34

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

TABLE 5

RELEASED FROM Nick DATE 07 February 1980 TIME 1424 MST

TRACKER COORDINATES (WSTM) X 470,734.56 Y 255,775.64 H 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL XX OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	245	13
90	265	11
150	290	11
210	295	12
270	MISG	MISG
330	MISG	MISG
390	MISG	MISG
500	MISG	MISG
650	MISG	MISG
800	MISG	MISG
950	265	30
1150	250	28
1350	250	27
1550	260	30
1750	260	33
2000	260	34

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

STATION ALTITUDE 3989.00 FEET MSL
7 FEB. 89   1400 HRS MST
ASCENSION NO. 59

SIGNIFICANT LEVEL DATA
0380920059
WHITE SANDS
TABLE 6

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
863.2	3989.0	19.5	-2.2	23.0
850.0	4582.1	15.0	-2.0	31.0
764.4	7457.7	6.6	-7.0	37.0
700.0	9332.5	[illegible].1	-9.0	51.0
684.2	10[illegible]	-2.5	-10.5	50.0
655.4	115[illegible]	-4.7	-13.0	52.0
618.2	130[illegible]	-8.1	-16.7	50.0
585.2	14[illegible].0	-12.0	-19.5	52.0
539.5	16[illegible]7.0	-14.5	-22.6	49.0
500.0	187[illegible].4	-19.4	-36.6	20.0
449.6	20912.4	-25.8	-42.0	20.0
400.0	23677.0	-31.5	-44.2	27.0
382.4	247[illegible].0	-33.8	-48.0	22.0
345.6	27[illegible].2	-39.6	-53.1	22.0
300.0	301[illegible]4.0	-45.7		
274.2	32109.9	-59.8		
269.2	32505.1	-50.2		
264.2	32911.3	-45.8		
259.4	33312.0	-46.4		
250.0	34117.3	-47.5		
241.6	34862.4	-46.8		
235.6	35415.8	-43.3		
230.8	35973.9	-41.6		
221.4	36802.4	-41.8		
212.8	37682.8	-43.9		
208.6	38124.5	-43.2		
200.0	39057.9	-43.5		
183.6	40948.9	-44.7		
164.0	43411.4	-49.7		
150.0	45325.4	-52.3		
127.4	48766.1	-57.7		
123.8	49363.1	-57.4		
113.6	51141.2	-60.8		
110.5	51710.0	-60.0		
100.0	53755.4	-62.3		
84.2	57287.9	-59.0		
70.0	61080.3	-62.6		
50.0	67955.8	-61.2		
47.6	68972.5	-58.4		
38.8	73222.9	-58.3		

STATION ALTITUDE 3989.00 FEET MSL
7 FEB. 60 1400 HRS MST
ASCENSION NO. 59

UPPER AIR DATA
0980020059
WHITE SANDS
TABLE 7'

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION .
3989.0	868.2	19.5	-2.2	23.0	1031.1	667.2	250.0	9.9	1.000253
4000.0	867.9	19.4	-2.1	23.1	1031.0	667.1	250.3	10.0	1.000253
4500.0	852.5	15.6	-1.9	29.9	1020.0	662.6	261.0	13.7	1.000253
5000.0	837.1	13.8	-2.7	31.9	1014.0	660.7	267.0	17.6	1.000249
5500.0	822.0	12.3	-3.5	32.9	1000.8	659.0	270.6	21.7	1.000245
6000.0	807.1	10.9	-4.3	33.9	987.8	657.3	273.3	25.8	1.000241
6500.0	792.5	9.5	-5.2	35.0	975.0	655.6	275.2	30.0	1.000237
7000.0	778.1	8.0	-6.1	36.0	962.3	653.9	276.6	34.2	1.000233
7500.0	764.0	6.6	-7.0	37.1	949.9	652.1	279.1	38.5	1.000229
8000.0	749.8	5.1	-7.3	40.1	937.0	650.5	281.4	42.8	1.000226
8500.0	735.9	3.7	-7.7	43.0	924.3	648.8	267.5	43.8	1.000223
9000.0	722.2	2.3	-8.1	46.0	911.9	647.1	252.5	46.4	1.000220
9500.0	708.8	.9	-8.6	49.0	899.6	645.4	224.8	45.8	1.000216
10000.0	695.5	-.5	-9.4	50.7	887.2	643.8	201.5	49.5	1.000213
10500.0	682.4	-1.7	-10.7	50.1	874.4	642.3	175.7	42.9	1.000209
11000.0	669.4	-3.1	-11.8	51.0	862.4	640.6	168.8	21.7	1.000205
11500.0	656.7	-4.6	-12.9	51.9	850.6	638.9	278.2	28.5	1.000201
12000.0	644.1	-5.7	-14.1	51.4	838.0	637.5	277.2	52.7	1.000198
12500.0	631.7	-6.8	-15.3	50.7	825.4	636.1	259.0	51.2	1.000194
13000.0	619.5	-8.0	-16.5	50.1	813.0	634.7	246.5	50.8	1.000190
13500.0	607.4	-9.3	-17.6	50.6	801.1	633.1	246.6	47.4	1.000187
14000.0	595.5	-10.6	-18.7	51.3	789.5	631.5	247.5	47.2	1.000184
14500.0	583.9	-11.9	-19.8	52.0	778.0	629.9	248.5	48.3	1.000180
15000.0	572.4	-12.6	-20.5	51.3	764.7	629.1	249.2	54.3	1.000177
15500.0	561.1	-13.2	-21.3	50.5	751.5	628.3	249.7	61.6	1.000174
16000.0	550.0	-13.9	-22.1	49.7	738.5	627.5	250.6	66.5	1.000170
16500.0	539.1	-14.6	-23.0	48.6	725.8	626.7	251.7	69.8	1.000167
17000.0	528.3	-15.9	-26.1	40.9	714.9	625.1	252.7	72.8	1.000163
17500.0	517.7	-17.2	-29.5	33.2	704.2	623.4	253.8	73.2	1.000160
18000.0	507.3	-18.5	-33.3	25.5	693.7	621.8	254.8	73.5	1.000157
18500.0	497.1	-19.8	-36.9	20.0	683.2	620.2	255.7	74.9	1.000154
19000.0	486.9	-21.0	-37.9	20.0	672.6	618.7	256.5	76.7	1.000151
19500.0	476.9	-22.3	-39.0	20.0	662.1	617.1	257.5	80.2	1.000149
20000.0	467.1	-23.5	-40.1	20.0	651.8	615.6	258.6	83.9	1.000146
20500.0	457.6	-24.8	-41.1	20.0	641.6	614.0	260.9	80.0	1.000144
21000.0	448.1	-26.0	-42.1	20.2	631.5	612.5	263.6	76.3	1.000142
21500.0	438.7	-27.0	-42.4	21.5	620.9	611.2	266.0	73.8	1.000139
22000.0	429.5	-28.0	-42.7	22.8	610.4	610.0	266.6	75.0	1.000137
22500.0	420.5	-29.1	-43.1	24.0	600.1	608.7	266.5	76.9	1.000134
23000.0	411.7	-30.1	-43.6	25.3	590.0	607.4	266.2	79.2	1.000132

STATION ALTITUDE 3989.00 FEET MSL
7 FEB. 80 1400 HRS MST
ASCENSION NO. 59

UPPER AIR DATA
038002005S
WHITE SANDS
TABLE 7 (cont)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	403.0	-31.1	-44.0	26.6	580.1	606.1	265.7	83.3	1.000130
24000.0	394.5	-32.2	-45.4	25.5	570.3	604.7	265.4	87.1	1.000128
24500.0	386.0	-33.3	-47.2	23.1	560.7	603.3	265.1	89.2	1.000125
25000.0	377.7	-34.5	-48.6	22.0	551.4	601.8	264.9	91.2	1.000123
25500.0	369.5	-35.8	-49.7	22.0	542.3	600.3	264.6	91.5	1.000121
26000.0	361.5	-37.0	-50.8	22.0	533.3	598.7	264.3	91.6	1.000119
26500.0	353.7	-38.3	-51.9	22.0	524.5	597.1	263.7	91.7	1.000117
27000.0	346.0	-39.5	-53.0	22.0	515.9	595.5	263.0	91.7	1.000115
27500.0	338.5	-40.7	-55.3	18.7**	506.9	594.0	262.5	88.6	1.000113
28000.0	330.8	-41.8	-57.9	15.2**	498.0	592.6	262.0	84.7	1.000111
28500.0	323.4	-42.9	-60.9	11.7**	489.3	591.1	260.3	76.7	1.000109
29000.0	316.2	-44.1	-64.5	8.2**	480.8	589.7	258.1	68.6	1.000107
29500.0	309.1	-45.2	-69.3	4.7**	472.4	588.2	254.2	63.2	1.000105
30000.0	302.2	-46.3	-79.2	1.1**	464.2	586.7	250.0	58.7	1.000103
30500.0	295.4	-47.4			455.8	585.3	247.4	57.5	1.000102
31000.0	288.6	-48.5			447.5	584.0	246.0	56.2	1.000100
31500.0	282.0	-49.5			439.3	582.6	247.0	54.5	1.000098
32000.0	275.6	-50.6			431.3	581.2	249.2	55.4	1.000096
32500.0	269.3	-50.2			420.7	581.7	252.7	60.6	1.000094
33000.0	263.1	-46.7			404.8	586.2	255.0	67.5	1.000090
33500.0	257.2	-46.7			395.6	586.3	256.1	76.8	1.000088
34000.0	251.3	-47.3			387.8	585.4	255.3	80.3	1.000086
34500.0	245.6	-47.1			378.6	585.7	253.3	79.5	1.000084
35000.0	240.1	-45.9			368.1	587.2	251.5	82.0	1.000082
35500.0	234.7	-43.0			355.2	591.0	250.2	85.7	1.000079
36000.0	229.5	-41.6			345.3	592.8	249.5	91.4	1.000077
36500.0	224.4	-41.7			337.8	592.6	248.5	95.2	1.000075
37000.0	219.4	-42.3			331.1	592.0	246.7	94.8	1.000074
37500.0	214.6	-43.5			325.4	590.4	245.1	93.8	1.000072
38000.0	209.8	-43.4			316.1	590.5	244.0	91.1	1.000071
38500.0	205.1	-43.4			310.9	590.6	243.5	88.2	1.000069
39000.0	200.5	-43.6			304.3	590.3	244.6	84.7	1.000068
39500.0	196.0	-43.9			297.8	589.9	246.2	81.9	1.000066
40000.0	191.7	-44.1			291.6	589.5	248.5	80.2	1.000065
40500.0	187.4	-44.4			285.4	589.2	251.0	79.0	1.000064
41000.0	183.2	-44.8			279.4	588.7	253.7	78.4	1.000062
41500.0	179.0	-45.8			274.3	587.4	256.4	78.4	1.000061
42000.0	175.0	-46.8			269.3	586.1	259.3	80.7	1.000060
42500.0	171.0	-47.8			264.4	584.8	262.1	83.3	1.000059
43000.0	167.1	-48.9			259.6	583.4	263.3	85.4	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
7 FEB 60 1400 HRS MST
ASCENSION NO. 59

UPPER AIR DATA
0380020059
WHITE SANDS
TABLE 7 (cont)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	163.3	-49.8			254.8	562.2	264.2	87.5	1.000057
44000.0	159.6	-50.5			249.7	561.3	265.0	87.6	1.000056
44500.0	155.9	-51.2			244.6	560.4	265.4	83.7	1.000054
45000.0	152.3	-51.9			239.7	559.5	265.8	79.7	1.000053
45500.0	148.8	-52.6			234.9	558.6	265.9	75.5	1.000052
46000.0	145.3	-53.4			230.3	557.6	266.0	71.2	1.000051
46500.0	141.9	-54.1			225.7	556.5	265.8	71.4	1.000050
47000.0	138.5	-54.9			221.2	555.5	265.7	72.5	1.000049
47500.0	135.3	-55.7			216.8	554.5	266.6	75.6	1.000048
48000.0	132.1	-56.5			212.4	553.4	267.5	79.1	1.000047
48500.0	129.0	-57.3			208.2	552.4	267.4	79.8	1.000046
49000.0	126.0	-57.6			203.6	552.0	267.1	80.0	1.000045
49500.0	123.0	-57.7			198.8	551.9	266.3	77.2	1.000044
50000.0	120.0	-58.6			194.9	550.6	265.0	72.2	1.000043
50500.0	117.2	-59.6			191.1	549.3	264.5	67.0	1.000043
51000.0	114.4	-60.5			187.4	548.1	265.6	61.6	1.000042
51500.0	111.6	-60.5			182.7	548.4	266.9	56.7	1.000041
52000.0	108.9	-60.3			178.3	548.3	268.4	55.0	1.000040
52500.0	106.3	-60.9			174.5	547.6	270.0	53.3	1.000039
53000.0	103.8	-61.5			170.7	546.8	272.1	54.2	1.000038
53500.0	101.3	-62.0			167.1	546.1	274.1	55.6	1.000037
54000.0	98.8	-62.1			163.1	546.0	276.5	50.8	1.000036
54500.0	96.4	-61.6			158.8	546.6	285.6	43.2	1.000035
55000.0	94.1	-61.1			154.7	547.3	295.3	35.9	1.000034
55500.0	91.9	-60.7			150.6	547.9	305.7	26.3	1.000034
56000.0	89.6	-60.2			146.7	548.5	320.5	18.4	1.000033
56500.0	87.5	-59.7			142.8	549.1	338.0	13.9	1.000032
57000.0	85.4	-59.3			139.1	549.7	340.2	9.8	1.000031
57500.0	83.3	-59.2			135.7	549.8	336.2	6.2	1.000030
58000.0	81.3	-59.7			132.7	549.2	291.9	7.2	1.000030
58500.0	79.4	-60.2			129.8	548.6	268.4	10.9	1.000029
59000.0	77.5	-60.6			127.0	547.9	258.9	20.8	1.000028
59500.0	75.6	-61.1			124.2	547.3	256.2	33.8	1.000028
60000.0	73.8	-61.6			121.5	546.7	255.5	45.2	1.000027
60500.0	72.0	-62.0			118.8	546.0	257.5	48.4	1.000026
61000.0	70.3	-62.5			116.2	545.4	259.2	51.6	1.000026
61500.0	68.6	-62.5			113.4	545.4	263.7	39.5	1.000025
62000.0	66.9	-62.4			110.6	545.5	280.1	19.9	1.000025
62500.0	65.3	-62.3			107.9	545.7	356.6	10.9	1.000024
63000.0	63.7	-62.2			105.2	545.8	42.9	21.2	1.000023

STATION ALTITUDE 5989.00 FEET MSL
7 FEB. 80 1400 HRS MST
ASCENSION NO. 59

UPPER AIR DATA
038002005S
WHITE SANDS
TABLE 7 (cont)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
63500.0	62.2	-62.1			102.6	566.0	55.6	35.7	1.000023
64000.0	60.7	-62.0			100.1	566.1	55.7	33.5	1.000022
64500.0	59.2	-61.9			97.6	566.2	50.0	22.4	1.000022
65000.0	57.8	-61.8			95.2	566.4	30.9	11.1	1.000021
65500.0	56.4	-61.7			92.9	566.5	281.8	11.0	1.000021
66000.0	55.0	-61.6			90.6	566.6	259.5	27.6	1.000020
66500.0	53.7	-61.5			88.4	566.8	256.8	36.3	1.000020
67000.0	52.4	-61.4			86.2	566.9	256.3	40.7	1.000019
67500.0	51.1	-61.3			84.1	567.0	256.4	43.1	1.000019
68000.0	49.9	-61.1			82.0	567.3	260.1	34.0	1.000018
68500.0	48.7	-59.7			79.5	569.2	266.5	25.1	1.000018
69000.0	47.5	-58.4			77.1	570.9	281.6	16.4	1.000017
69500.0	46.4	-58.4			75.3	570.9	321.3	10.8	1.000017
70000.0	45.3	-58.4			73.5	570.9	10.3	13.7	1.000016
70500.0	44.2	-58.4			71.7	571.0	9.9	15.7	1.000016
71000.0	43.2	-58.4			70.0	571.0	9.7	17.6	1.000016
71500.0	42.2	-58.3			68.4	571.0			1.000015
72000.0	41.2	-58.3			66.7	571.0			1.000015
72500.0	40.2	-58.3			65.1	571.0			1.000014
73000.0	39.2	-58.3			63.6	571.0			1.000014

STATION ALTITUDE 3989.00 FEET MSL
7 FEB. 60 1400 HRS MST
ASCENSION NO. 59

MANDATORY LEVELS
0360020059
WHITE SANDS

TABLE 8

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4579.	15.0	-2.0	31.	262.2	14.3
800.0	6247.	10.2	-4.8	34.	274.3	27.9
750.0	7992.	5.2	-7.3	40.	281.4	42.8
700.0	9823.	-.1	-9.0	51.	208.7	50.9
650.0	11753.	-5.2	-13.5	52.	277.5	41.0
600.0	13798.	-10.1	-18.3	51.	247.0	46.7
550.0	15980.	-13.9	-22.1	50.	250.6	66.4
500.0	18333.	-19.4	-36.6	20.	255.4	74.3
450.0	20871.	-25.8	-42.0	20.	263.0	77.1
400.0	23638.	-31.5	-44.2	27.	265.6	64.7
350.0	26693.	-38.9	-52.4	22.	263.4	91.7
300.0	30105.	-46.7			249.2	56.4
250.0	34045.	-47.5			254.9	80.2
200.0	38966.	-43.6			244.7	84.5
175.0	41897.	-46.8			259.2	80.6
150.0	45205.	-52.3			265.9	77.2
125.0	49022.	-57.5			267.0	80.1
100.0	53591.	-62.3			275.4	55.2
80.0	58153.	-60.0			274.9	9.4
70.0	60872.	-62.6			259.4	51.9
60.0	63995.	-62.0			54.0	29.2
50.0	67702.	-61.2			259.4	35.4
40.0	72301.	-58.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.